



## PATENT ABSTRACTS OF JAPAN

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(54) **FLAME-RETARDANT, FLAME-RETARDANT  
 RESIN COMPOSITION AND FLAME-RETARDANT  
 RESIN MOLDED PRODUCT**

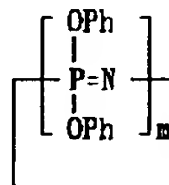
groups are contained in an amount of 50-99.9% based on the total phenyl groups in the compounds of formulas I and II.

(57) Abstract:

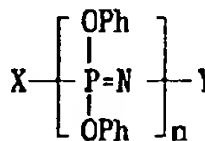
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PROBLEM TO BE SOLVED: To obtain a flame-retardant not containing a halogen, having a high melting point and a low volatility, not deteriorating the original characteristics, such as mechanical characteristics and moldability, of resins, and useful for electric parts, electronic parts or the like by including a specific crosslinked phenoxyphosphazene compound.

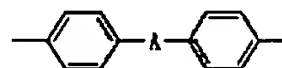
SOLUTION: This flame retardant comprises a crosslinked phosphazene compound obtained by crosslinking one or more kinds of phosphazene compounds selected from the group consisting of a cyclic phosphazene compound of formula I [(n) is 3-25; Ph is phenyl] and a linear phosphazene compound of formula II [X is N=P(OPh)<sub>3</sub> or N=P(O)OPh; Y is P(OPh)<sub>4</sub> or P(O)(OPh)<sub>2</sub>; (n) is 3-1,000] with one or more kinds of crosslinking groups selected from the group consisting of 0-, m- and p-phenylene groups, biphenylene group and a group of formula III [A is C(CH<sub>3</sub>)<sub>2</sub>, SO<sub>2</sub>, S or O]. Each of the crosslinking groups is placed between the two phenyl group-released oxygen atoms of the crosslinked phosphazene compound, and the crosslinked phenyl



I



II



III